

R E P O R T R E S U M E S

ED 020 050

RC 002 477

LA LENGUA EXTRANJERA EN LA ESCUELA PEQUENA (FOREIGN LANGUAGE IN THE SMALL SCHOOL), A REPORT OF AN EXPERIMENTAL WESTERN STATES SMALL SCHOOLS PROJECT STUDY DESIGNED TO PROVIDE FOREIGN LANGUAGE PROGRAMS IN THE SMALL ELEMENTARY SCHOOLS.

BY- ANDERSON, MERLIN

NEVADA WESTERN STATES SMALL SCHOOLS PROJ.

PUB DATE

66

EDRS PRICE MF-\$0.50 HC-\$3.08 75P.

DESCRIPTORS- ACADEMIC ACHIEVEMENT, *AUDIOLINGUAL METHODS, AUDIOVISUAL AIDS, COURSE EVALUATION, EXPERIMENTAL PROGRAMS, *FLES, GRADE 5, GRADE 6, *LANGUAGE INSTRUCTION, MOTIVATION, MEXICAN AMERICANS, PRETESTING, POST TESTING, SECOND LANGUAGE LEARNING, *SMALL SCHOOLS, STUDENT TEACHER RELATIONSHIP, *SPANISH, TEACHER ATTITUDES, TEACHER EVALUATION, TEACHER ORIENTATION, *TEACHER SHORTAGE, WORKSHOPS, NEVADA; FORD FOUND., CALIFORNIA, NDEA,

A 1965-66 CONTROLLED EXPERIMENT AT THE FIFTH AND SIXTH GRADE LEVELS WAS CONDUCTED IN SELECTED SMALL SCHOOLS IN SOUTHERN NEVADA TO DETERMINE IF SUCCESSFUL BEGINNING INSTRUCTION IN A FOREIGN LANGUAGE (SPANISH) CAN BE ACHIEVED BY NON-SPECIALIST TEACHERS WITH THE USE OF AUDIO-LINGUAL-VISUAL MATERIALS. INSTRUCTIONAL MATERIALS USED WERE "LA FAMILIA FERNANDEZ" FROM ENCYCLOPEDIA BRITANNICA EDUCATIONAL CORPORATION. FIVE OF THE 6 EXPERIMENTAL CLASSES WERE RATED FAVORABLY IN RELATION TO THE CONTROL GROUP. IT WAS CONCLUDED THAT THERE WERE NO SIGNIFICANT DIFFERENCES IN ACHIEVEMENT BETWEEN THE EXPERIMENTAL CLASSES AND THE CONTROL GROUP, ALTHOUGH IT WAS DETERMINED THAT ACADEMIC RETURNS DIMINISH AS THE COURSE PROGRESSES TO MORE DIFFICULT STAGES. THE EXPERIMENT WAS NOT INTENDED TO REPLACE THE QUALIFIED LANGUAGE SPECIALIST, BUT SOUGHT AN ALTERNATIVE WAY TO MEET THE NEED FOR A FOREIGN LANGUAGE PROGRAM WHEN QUALIFIED INSTRUCTORS ARE UNAVAILABLE. (JH)

ED020050

WESTERN
STATES
SMALL
SCHOOLS
PROJECT

1966

LA LENGUA EXTRANJERA

en la
Escuela Pequeña

Foreign Language
in the
Small School



MERLIN ANDERSON

DAVID L. JESSER
Project Director

BURNELL LARSON
Superintendent of Public Instruction

WSSSP



RC-002477

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

LA LENGUA EXTRANJERA

en la

ESCUELA PEQUEÑA

A report of an experimental Western States Small Schools
Project study designed to provide foreign language
programs in the small elementary schools.

Merlin D. Anderson
Consultant, Foreign Languages
State Department of Education
Carson City, Nevada

TABLE OF CONTENTS

	Page
INTRODUCTION	1
Statement of Problem	1
Statement of the Hypothesis	5
Delimitations	5
Summary	6
Definition of Terms	7
REVIEW OF LITERATURE	9
Teacher Availability	9
Foreign Language Instruction Project	
University of Illinois	14
The Effect on Basic Learning by The Introduction of	
FLES Into The Curricula	16
Summary	17
METHODS AND PROCEDURES	19
WSSSP Project LEEP	19
State and Project Counties Profile	23
Financial Distribution	28
Workshops	30
Evaluation	36
Summary	38
RESULTS AND FINDINGS	39
Forms of Evaluation	39
Hypothesis	39
In-class Observations	39
Achievement Test	45
DISCUSSION AND IMPLICATIONS	49
Additional Observations	49
Second and Third Year Study	51
Implications of WSSSP-FLES Project	51
Weaknesses	52

TABLE OF CONTENTS (Continued)

	Page
SUMMARY AND CONCLUSIONS	54
Conclusions	55
LITERATURE CITED	56
APPENDIX	59
VITA	70

LIST OF TABLES

Table	Page
1. Nevada secondary school foreign language enrollment study . .	11
2. Comparison of mean scores and standard deviations of experi- mental and contrast groups	16
3. Education background	24
4. Foreign language preparation	24
5. In-class observation	41
6. Evaluators' comments	42
7. Comparison of mean scores in percentages of each experimental school and control-school at end of first year in Spanish . . .	46
8. Comparison of mean scores and standard deviations of experi- mental and control groups at the close of the first year of in- struction in Spanish	48

LIST OF FIGURES

Figure	Page
1. Geographical location of schools in WSSSP Foreign Language Study	22
2. Lincoln County map	26
3. Clark County map	29

INTRODUCTION

Statement of Problem

"Casey Bill"

The "Casey Bill"¹ enacted by the California Legislature in 1961 opened a "Pandora's Box" for the teaching of Foreign Language in the Elementary Schools (FLES). This bill listed in the California Education Code as Section 7604 (C) made foreign language instruction mandatory in grades 6, 7, and 8 for all public schools, to begin in September of 1965. The passing of this particular piece of legislation produced mixed emotions among educators throughout the United States and particularly those in California. The foreign language profession (PMLA, 1961; Grittner et al., 1965; PMLA, 1956) had campaigned for some time the cause for a longer sequence of language study in order to meet the needs and goals of foreign language learning. However, at the same time a problem was posed concerning the availability of elementary foreign language teachers. It became apparent that the number of foreign language teachers which would be necessary to adequately fulfill the requirements of this legislation were not available nor could they be trained during the years between the enactment of the legislation and when it was to go into force. Many school districts made honest attempts to fulfill the spirit of the law

¹"Casey Bill" AB 2564 (Section 7604) Education Code California, 1961.

while other districts made efforts only to comply with the letter of the law. Consequently, during school year 1965-1966 there existed in the elementary schools of California, a variety of programs with many different goals. Some employed closed circuit television, some programmed materials, while others utilized language specialists and other varied approaches. Many private business establishments took advantage of the situation to flood the educational market with materials, texts, and electronic gadgets of every variety. Many of these were of very poor quality and more than a few districts spent large sums of money on untested, unreliable programs.

Western States Small Schools Project

The Western States Small Schools Project (WSSSP) comprising the states of Arizona, Colorado, Nevada, New Mexico, and Utah have had as part of its goals that of providing or seeking ways of providing opportunities for students in small schools. The project wanted these students to compete and to have sufficient and adequate experience to prepare themselves for occupations and further schooling after graduation from high school. Many innovative practices have been employed or developed by administrators and teachers under the direction of the Western States Small Schools Project funded by the Ford Foundation. Some of these have been flexible scheduling, computer scheduling, amplified telephone teaching, ungraded schools, etc.

Nevada WSSSP

The Nevada emphasis in the Western States Small Schools Project (WSSSP) has turned to programmed learning devices and media utilization in expanding curriculum offerings in the small schools. A number of the innovations mentioned in the previous paragraph have been utilized in providing a program where there had existed and still exists an inadequate supply of teaching personnel. The teacher shortage which exists in many small rural schools (Borg, 1965) is further complicated by lack of funds to support elective programs because of small school enrollment.

It was felt that in the area of foreign languages where many new approaches had been developed in the neighboring state of California that this was perhaps a good subject area in which to test some of the educational materials claimed by their producers and authors to be essentially self-teaching or which necessitated very little background experience on the part of the teacher. This would, therefore, allow the use of present school staff without additional salary expense, plus providing an experience to the students which they otherwise might not have. This study could then provide some answers to staff utilization, practicability of specific teaching materials, and possibilities for offering courses not already in the curriculum.

Preliminary planning on problem

Discussion of materials was begun between the Nevada Director of

the Western States Small Schools Project (WSSSP) and the foreign language consultant for the Nevada State Department of Education to determine which set of materials, in the opinion of the foreign language consultant, would provide the greatest possibility of a successful experience and which could also be used by a non-specialist teacher. It was proposed that a study be conducted employing fifth and sixth grade classes, if at all possible, in testing the adequacy of these materials to teach a foreign language to students by teachers with little or no background in the language to be taught. At least four classes would be needed in a fairly small geographical area for the study. One or more schools using the same block of time as anticipated in the experimental schools were to be selected as the control school. Inasmuch as the experiment was to be conducted using schools with on-going programs it would be difficult to find very many schools having a program comparatively equal to that of the experimental schools.

The teachers of fifth and sixth grade classes in the experimental schools were to be chosen who had little or no background in the teaching of Spanish. The control school would have a specialist teacher who had spent time in a foreign Spanish speaking country and who had been certified to teach Spanish. Using the material selected, the experimental teachers were to teach during fiscal year 1965-1966 the regular fifth and sixth grade classes while the control school used their materials and an acceptable audio-lingual approach. At the end of the school year all

groups were to be tested as to achievement to ascertain whether the degree of achievement of the experimental groups was significantly different, and if so, how much from that of the control group.

Statement of the Hypothesis

The regular classroom teacher, given the necessary orientation and guidance and using sound teaching materials, can teach a foreign language in its beginning level with a satisfactory degree of student achievement as compared to a class taught by a language specialist.

Delimitations

For the purpose of clarification, this project is not intended nor should it be inferred that it casts reflections on teacher training, teacher qualification, or programmed teaching. It is not meant to imply that machines can take the place of teachers or that language can be taught without proper training. However, it is research into a very real problem and is meant to supply some answers that can be used in further research as a guide to offering an education in foreign languages that otherwise could not be provided due to a lack of specialized personnel. It is not expected that this research will show an ideal program or indicate a means of supplanting programs already in existence or eliminating teachers of foreign languages. The results given here represent the findings of this particular study and should not be construed to show what

occurs in other areas, but should cast some reflection or light upon possible future study into the area of material utilization.

Summary

The "Casey Bill" enacted in 1961 in the California Legislature created a situation in which a shortage of foreign language teachers at the elementary level was imminent. Consequently, many educational publishers and others produced textual and electro-mechanical materials to assist schools in meeting this legislation. Many were good, but too many were of poor quality. Many claims were made for the success of the different materials by their publishers.

The Western States Small School Project, of which Nevada is a part, has been studying utilization of different materials and media for expanding and enriching course offerings in the small schools.

Foreign languages have always been an elective area rather difficult to provide in the small school because of lack of qualified foreign language teachers and adequate funding as a result of small school enrollment. A study was planned therefore to utilize materials which, according to their authors, required very little teacher preparation. This was to be done in several small rural schools in Nevada and the results to be compared with a control group having a specialist teacher. If there were no significant difference between the achievement of the experimental group and the control group, this would indicate, at least on

the surface, that quality audio-lingual-visual materials can provide an adequate program in foreign languages at the beginning level.

Definition of Terms

WSSSP--Western States Small Schools Project funded by the Ford Foundation comprising the states of Arizona, Colorado, Nevada, New Mexico, and Utah.

Project LEEP--La Lengua Extranjera en la Escuela Pequena.
(Translation: Foreign Language in the Small School.)

Language specialist--A person or teacher who devotes the major portion of his teaching load in the area of foreign languages.

Non-specialist--A person or teacher who has had essentially no foreign language training of any kind.

Small school--As defined by WSSSP, a small rural school averaging fewer than 50 pupils per grade in a community of less than 2,500 population.

FLES--Foreign Languages in the Elementary School.

Audio-lingual-visual materials--In this study, "La Familia Fernandez" materials from Encyclopedia Britannica Educational Corporation were used; however, this term refers to any such comparable materials.

Self-instructional materials--Materials which are a part of, or supplementary to the teachers presentation, with the exception that they are manipulated by the student.

Incremental materials--Materials which produce a well articulated sequence employing incremental blocks of subject matter, over a period of time and through learning of various skills.

Electro-mechanical aids--Equipment such as tape recorders, movie projectors, filmstrip projectors, overhead transparencies, etc.

REVIEW OF LITERATURE

Teacher Availability

Each school year the shortage of available teachers becomes more acute. Recent reports from school districts throughout the United States served notice that the situation has never been more critical (Wilson, 1966a, 1966b; Graybeal, 1966). Some geographic areas have a smaller teacher supply than others according to the report by Graybeal (1966). This is particularly so in the state of Nevada where there was a decrease in elementary education graduates of 27.8 per cent from fiscal year 1964 to fiscal year 1965 (Graybeal, 1966). This is second only to the state of California which showed a decrease of 41 per cent. Nevada had the largest decrease in secondary education graduates with 22.1 per cent. Only one other state, Rhode Island, had over a 10 per cent decrease--13.2 per cent. The decrease in elementary education graduates shown in California and Nevada indicates a very serious shortage of teachers. This overall lack of teachers is compounded even further by the sparse population over the majority of the state of Nevada. It has been expressed in many conferences by administrators of small schools that it is more difficult to find teachers willing to teach in a small school than in a larger urban or metropolitan school. As a result, the Western States Small Schools Project conducted a study published by Borg (1965, p. 32)

wherein students from the five different states who were graduating from colleges and universities were asked if they would choose a small school as first choice, second choice, or third choice. The results for the elementary teacher showed "the small rural school is still the last choice for over 41 per cent of the student survey." For secondary graduates, "it will be noted that of the entire secondary education student sample, 14.6 per cent selected the small rural secondary schools as their first job preference."

Teachers in the very small rural schools, those having less than 100 students, usually carry many preparations outside of their major and minor fields. Because of required subjects and low funding it is quite difficult to provide an expanded curriculum offering as is typical of large urban schools. In the area of foreign languages this is definitely the case. Graybeal (1966) shows in his report that the supply of Russian and Latin teachers has decreased as well as has the supply of teachers in some other foreign language areas. Nevada (Table 1) has experienced a large increase in foreign language enrollment in the last five years. From fiscal year 1960 to fiscal year 1965 foreign language enrollment has increased 178.8 per cent. The increase in foreign language teachers has been slightly less than half the growth experienced in foreign language students at 84.0 per cent. It has only been recently that the shortage of foreign language teachers in the elementary school has also become apparent. Part of this is a result of the aforementioned "Casey Bill"

Table 1. Nevada secondary school foreign language enrollment study

	1960	1961	1962	1963	1964	1965
French	1,041	1,341	1,974	2,331	2,632	3,126
German	98	196	371	788	982	1,620
Italian	44	41	22	39	57	46
Latin	698	615	924	725	443	468
Russian	-	-	8	39	36	30
Spanish	2,226	2,775	3,845	4,340	5,185	6,161
Total F. L. enrollment	4,107	4,968	7,144	8,262	9,335	11,451
Per cent increase	0	20.9	73.9	101.1	127.2	178.8
Teachers	75	84	99	118	127	138
Per cent increase	0	12.0	32.0	57.3	69.3	84.0
Teacher-student ratio	54.7	59.1	72.1	70.0	73.5	82.9

enacted in California. As of the enactment of this bill, a need was created for many foreign language teachers in the schools of California.

The most common reason given by school districts in requesting exemption from the requirement of providing instruction in a foreign language was inability of the district to obtain qualified teachers. Inability of the district to pay for the extra expense of foreign language instruction ranked second in numbers of response. (Dusel, 1965, newsletter)

Proposals for solving teacher shortages

A number of solutions have been posed by different educators to make up for the lack of a language specialist. One such proposal was made by Wonder (1965) wherein he proposes the use of human natural resource found in our indigenous bi-lingual Mexican American population. Many are college graduates and have a varying degree of fluency in Spanish. With intensive training, he believes they could adequately relieve the acute shortage of foreign language teachers in California. In December 1963, at a conference called by the Modern Language Association a "call to action" was given to overcome the critical shortage of teachers of Modern Foreign Languages. The following steps were proposed:

1. Public announcement of certification requirements (statement of qualifications, course syllabi) and of ways of meeting these requirements expeditiously (recommended courses, summer institutes, reading lists, taped courses and other audio-visual materials, qualifying examinations).
2. Administration of the MLA (or equivalent) Proficiency Tests for diagnostic purposes.
3. Interviews with teacher candidates by one or more authorities designated by the State Department of Education or by a teacher-preparing institution to appraise the candidates' qualifications (including credentials from foreign universities) and to advise them how to overcome any deficiencies discovered.
4. Apprentice teaching guided jointly by a demonstration teacher and a supervising teacher.
5. Final appraisal of the candidate's readiness to teach by a committee of experts.

6. Administration of a second form of the MLA (or equivalent) Proficiency Tests, if needed to determine proficiency.
7. Recommendations for certification by those concerned with the candidate's preparation.
8. Granting of license by the state. (MLJ, 1966, p. 399-400)

In a report made by the Board of Education of the City of New York (1961, p. 12) the following reference was made to the approval of teachers of foreign languages: "The foreign language teachers of most of these authorized classes are not licensed in the foreign language, but all have been examined and approved by the director of foreign languages."

A number of articles have been written (Monroe, 1964; Delbario, 1965; Harris and Dostal, 1965) concerning the use of audio-visual aids in foreign language teaching as a means of helping the poorly prepared teacher to do a better job. This is not to say that the good teacher does not take advantage of these materials but in many cases they are aimed at the teacher who needs something besides his own language ability to do a good job. The amplified telephone as a media of language instruction is presently being experimented with by a number of foreign language specialists. One such research project is currently underway at Ohio State University under the direction of Mr. Philip D. Smith, former language consultant for the State Department of Education for Nevada. He is teaching Spanish to a number of classes located in different schools simultaneously by telephone.¹ Of the many innovative practices used to

¹Letter from Philip D. Smith, 1966

provide a language program where a definite lack of teacher staff is apparent, only one has been found by the author which is similar to the research project undertaken in this paper. That project is a foreign language instruction project at the University of Illinois conducted by Charles E. Johnson, Joseph S. Flores, Fred P. Ellison, and subsequently Miguel A. Riestra (1963).

Foreign Language Instruction Project
University of Illinois

As far as can be ascertained only one other research project similar to the present one has been published, and that is the University of Illinois Foreign Language Instruction Project (Johnson, Flores, and Ellison, 1960, 1961a, 1961b; Johnson, et. al., 1963).

The main purpose of the study is to develop a procedure using newer educational media, for teaching foreign languages to elementary school children which is effective when used by teachers unfamiliar with the foreign language being taught, and to evaluate the devised procedure by comparing its effectiveness with that of a more conventional approach to foreign language instruction requiring specialist teachers. (Johnson, Flores, and Ellison, 1960, p. 1)

Five classrooms (approximately 125 students) were involved in the Illinois study. They began the study of Spanish in the fourth grade and continued for a period of three years under the project.

Two classes were taught by language specialists, two by teachers unfamiliar with the language and one class was begun a year earlier in the

third grade by a language specialist as a pilot study for the development of materials to be used with the two experimental classes.

The two contrast classes were taught by teachers using "conventional" means of foreign language instruction. The experimental groups were taught by closed circuit TV and tape recordings. Once a week the lesson was presented by TV and on the subsequent days, instruction was provided by tape recordings prepared by language specialists and native speakers.

Evaluation was based upon data accumulated at the end of each semester which was examined to determine how closely the language progress of the experimental groups was compared with that of the contrast groups. Evaluations were based upon tests, tape recordings, and personal interviews.

The following table shows the results of the first year of instruction under this program. The t-test represents the significance of the difference between means.

The results indicated no significant difference in achievement between the two groups.

The conclusion was made by the researchers that the experiment was a success in that the experimental groups all scored above the 60 percentile level in raw scores as compared to the contrast group. The 60 percentile scores were determined arbitrarily as the dividing line between successful or non-successful achievement. The researchers recommended this particular foreign language program with limitations where there is a shortage of competent language specialists.

Table 2. Comparison of mean scores and standard deviations of experimental and contrast groups^a

	Experimental N = 44		Contrast N = 49		t	Probability
	Mean	S.D.	Mean	S.D.		
Listening comprehension	48.00	11.49	51.81	8.18	-.356	.73
Immediacy of response	48.16	10.64	51.61	9.21	-.322	.75
Appropriateness of response	48.49	10.69	51.42	9.22	-.274	.79
Pronunciation	48.88	10.14	51.08	9.87	-.206	.83
Response to directions	46.15	8.82	53.46	9.82	-.683	.50
Composite score	47.94	8.56	51.88	7.62	-.370	.71

^a(Johnson, Flores, and Ellison, 1960, mimeographed)

The Effect on Basic Learning by The Introduction
Of FLES Into The Curricula

One of the great concerns of administrators is that the introduction of FLES into the course of study will jeopardize achievement in the basic subject areas traditionally part of the curriculum. This is a well justified concern, and must be answered by educators in the foreign language field. A number of studies have been conducted to ascertain whether this concern is an assumption or can be truly justified.

The previously mentioned University of Illinois Project conducted

by Johnson, Flores, and Ellison (1961b) also conducted as part of their research, a study into this problem. The findings upon examination revealed that:

Insofar as general achievement test scores were concerned, the experimental group (that which received foreign language instruction twenty-five minutes a day during the second semester) showed gains equal to or greater than the control during the academic year. That is, in all but three categories the experimental group showed greater gain than the control group. In the three categories in which the control showed greater gains than the experimental group the gains so closely approached zero that they may be regarded as insignificant. (Johnson, Flores, and Ellison, 1961b, p. 4).

The final report of the Illinois Foreign Language Instruction Project shows further research into comparable achievement of the two groups. After employing a more rigorous instrument to evaluate the students, the results still indicated, after three years, no significant difference. The tests did show a natural digression to the means as compared with the earlier report made in 1961 (Johnson, et. al., 1963).

Summary

General teacher shortages are occurring in most every part of the United States. Many of the teacher training institutions cannot supply the necessary prospective teachers for the states they serve. This is particularly true in Nevada and California. The problem becomes even more difficult because of the great scarcity of population in Nevada and the reluctance of teachers to teach in small rural schools.

Most small rural schools have a difficult time offering elective

subjects because of the lack of teachers and funds. Many solutions have been offered to alleviate the teacher shortage. Among these are plans for providing needed foreign language teachers. Proposals have been made to employ native-born bi-lingual speakers, use of TV, audio-visual aids, amplified telephone, and others.

The University of Illinois Foreign Language Instruction Project made use of closed circuit TV and tapes manipulated by non-specialists to determine if they could provide a satisfactory foreign language program as compared with classes taught by a specialist teacher. Their results indicated that after one year of study there was no significant difference. The University of Illinois study also compared basic achievement of students taking a foreign language with those who had not. The results after three years showed no significant difference.

METHODS AND PROCEDURES

WSSSP Project LEEP

Proposal pre-planning

Before developing a method and procedure which would seem to hold some possibilities for FLES programs in the smaller rural schools, several assumptions were made. Among these were:

1. Elementary pupils would benefit in several ways from FLES type programs.

2. Pupils could learn by using technological devices prepared materials, etc. with a minimal of specialization on the part of the elementary teacher.

3. Materials, specialized equipment, etc. would be available.

On the basis of these assumptions a plan outline was contemplated wherein it was proposed that certain people, schools, materials, and environments be identified. These were:

1. Small rural elementary schools.

2. Teachers within the schools having little or no background in Spanish.

3. An interest and desire by teachers and administrators to participate in the project.

4. Willingness of school districts to supply necessary funds for

the continuation of the project in cooperation with the Western States Small Schools Project and the State Department of Education for a period of three years.

5. A geographical proximity which would allow for in-service training and interaction between experimental project schools.

6. Incremental materials which employ audio-visual components such as filmstrips, tapes, movies, etc.

Selection of materials

Of the six items mentioned, it was felt that the materials be identified first, as they would be the items for which the local school district would be financially responsible. Several different sets of materials were reviewed. The quality of the materials reviewed covered the spectrum from good to bad. The materials finally selected were chosen because it was felt they could best be utilized by non-specialists, as they consisted of movies, filmstrips, tape recordings, visually cued tests, and a teacher manual written for non-specialists. These materials (La Familia Fernandez, Encyclopedia Britannica Education Corp.) are representative of a number of good quality audio-lingual-visual programs in foreign languages prepared by different publishing companies. It was not intended that the project should endorse any set of materials, but it did seem that this particular set of materials would be easiest to implement.

The project plan was drawn up and the WSSSP Director and Foreign

Language Consultant for the State Department of Education traveled to Lincoln and Clark counties and presented the proposal to the superintendent of Lincoln County and the Area Supervisor for the rural schools of Clark County. The proposal was received with enthusiasm and plans were made to set the project in motion. Four schools were tentatively identified. However, after the administration discussed the possibilities with their teachers and principals, two more schools requested permission to participate (see Figure 1). Thus, a total of six experimental schools and one control school were identified for the project. The control school selected, located at Overton, Nevada, was the Moapa Valley Elementary Secondary School. The six experimental schools were Indian Springs Elementary, Virgin Valley Elementary located at Mesquite, Pahrnagat Valley Elementary located at Alamo, Caliente Elementary, Panaca Elementary and Pioche Elementary.

Identification of teachers and classes

The selection of teachers and classes was made simultaneously by the administration in both counties. The selections which they made were based on the criteria in the proposal, i.e., fifth or sixth grade classes preferably and teacher desire. The teachers and classes selected were: Harold Jackson, sixth grade, Pioche Elementary; Garland Hollingshead, sixth and seventh grades, Panaca Elementary; David Love, sixth grade, Caliente Elementary; Carl Hastings, fifth and sixth grades, Pahrnagat Valley Elementary; Elwin Jones, fifth grade, Virgin Valley

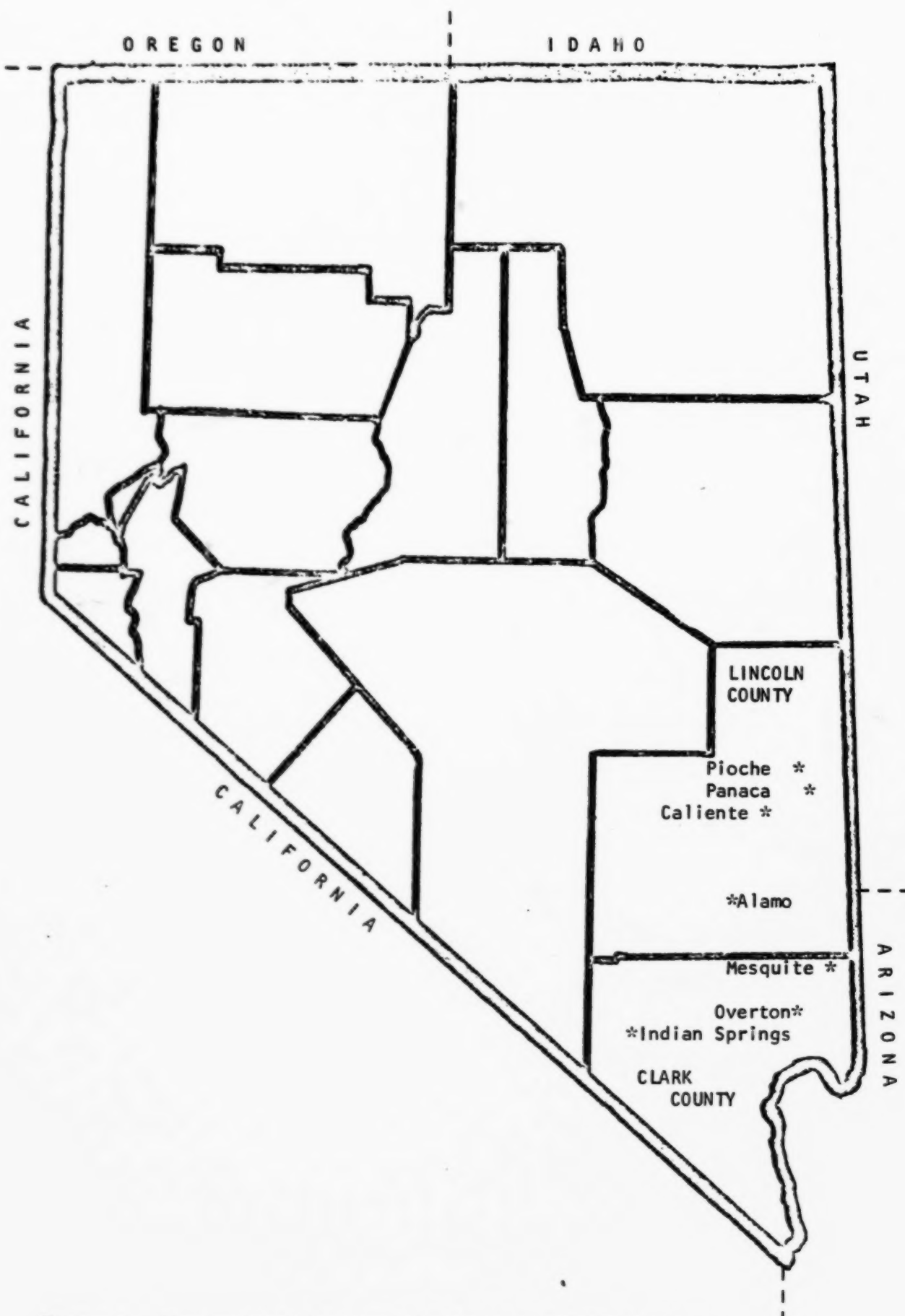


Figure 1. Geographical location of schools in WSSSP Foreign Language Study.

Elementary; and Maurice Donellan, sixth and seventh grades, Indian Springs Elementary. The teacher and class selected for control was Theodore Hamblin, seventh grade, Moapa Valley. The teachers identified with these classes completed a questionnaire (see Appendix) and the results are shown in Tables 3 and 4. From our inspection of Table 3, the amount of teaching experience can be seen to range from two years to twenty and one-half years; therefore, giving a fairly broad sample of teaching experience. The data in Table 4 indicate that two teachers had studied French and German, some at the university level, some at the high school level. None of the teachers had any extended length of time in another country. It can be seen that the criteria for little or no language background was met. The teachers and administration expressed a great deal of enthusiasm and interest in the project and desired to be a part of it.

State and Project Counties Profile

Nevada

Nevada ranks seventh in size and forty-ninth in population among all the states (Hulse, Larson, and Leavy, 1967). Its 110,540 square miles are bordered on the north by Oregon and Idaho, on the east by Utah and Arizona and on the south and west by California (see Figure 1, p. 22).

California and Nevada share a common border of over 600 miles.

Table 3. Education background

Teacher	Degree	Years teaching experience	Years teaching in Nevada	University
A	B.A.	2	2	Fresno State College
B	B.S.	7	4	Utah State University
C	B.S.	4	4	Utah State University
D	B.S.	4	4	Utah State University
E	B.S.	20 1/2	17 1/2	Utah State University
F	B.S.	10	10	University of Nevada

Table 4. Foreign language preparation

Teacher	Foreign language studied	Educational level	Length of time	Residence country abroad
A	Spanish French	High school University	1 2	0
B	Spanish	High school	1	0
C	None			
D	French French	High school University	1 1/2	0
E	None			0
F	German	University	1	0

The majority of Southern Nevadans identify with Los Angeles and Southern California while conversely most Northern Nevadans identify with San Francisco, Sacramento, and Northern California. The geographical location of the major cities of Nevada is probably the biggest factor for this identification. Approximately 80 per cent of the population of Nevada lies within 50 miles of the state of California. A large part of Nevada's gaming industry is supported by Californians who find its proximity advantageous for weekend vacations. Likewise Nevadans living on the eastern slopes of the Sierra Nevada Mountains go shopping and vacationing in nearby California.

Nevada, however, is dependent to a greater degree upon California than is California upon Nevada. This obviously is because of the great difference in total population and industry. 1960 census shows California with a population of 15,717,204 and Nevada 285,278 or a ratio of 55 to 1.

Description of Lincoln County

Lincoln County (Figure 2) has four centers of population: Pioche, Panaca, Caliente, and Alamo. Pioche at the northern most end of Lincoln County is the county seat and has a population of 700. In recent years, the economy has been based on agriculture, but there has been an increased amount of activity in mining. Pioche has one elementary school with grades one through eight. The enrollment is approximately 130 students. Eleven miles south is located the town of Panaca. Panaca has a population of approximately 500 and here is located Lincoln County High

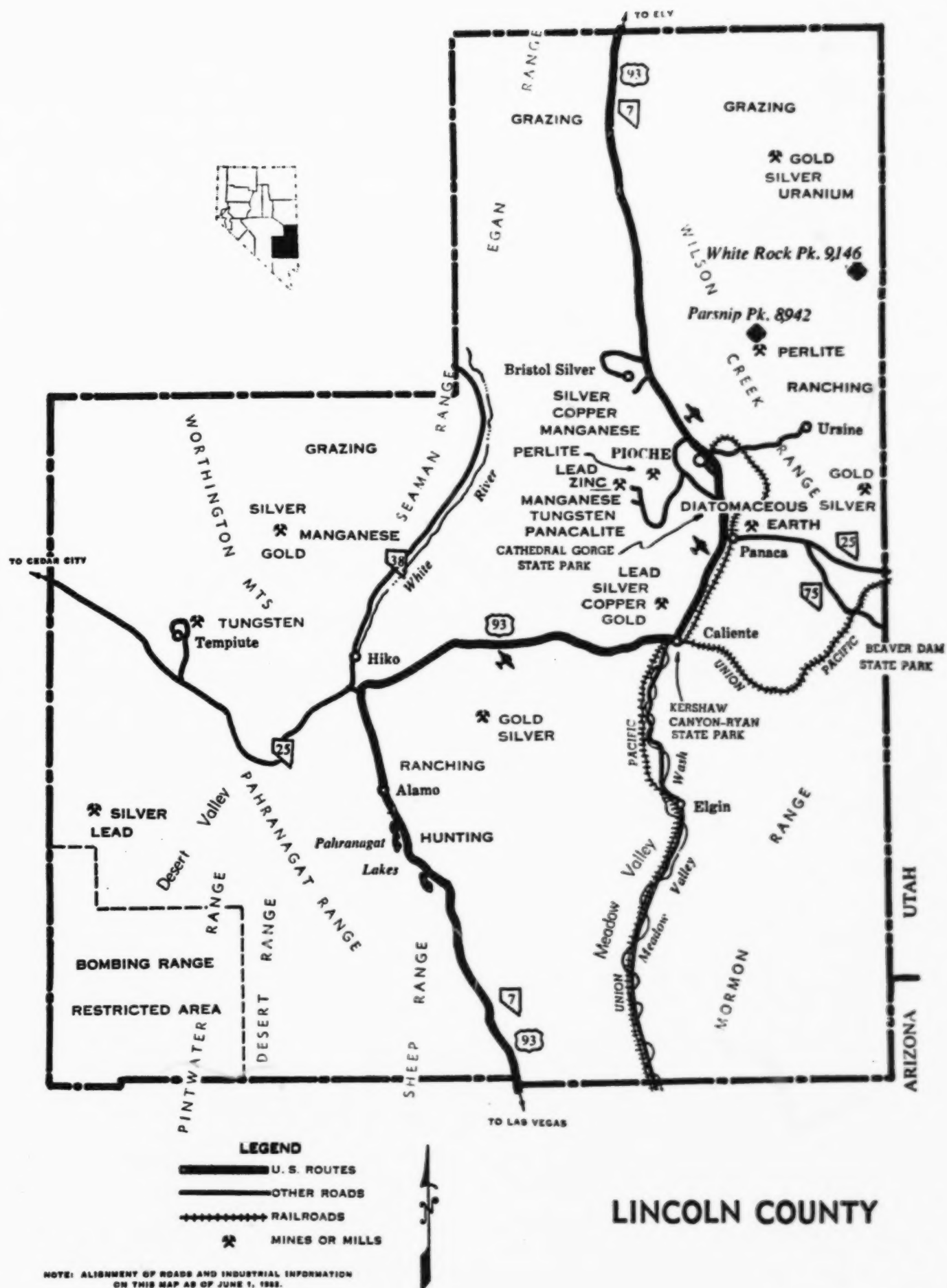


Figure 2. Lincoln County map

School with grades nine through twelve (enrollment 182) and Panaca Elementary School, grades one through eight. The elementary school has an enrollment of approximately 110 students. The high school receives students from Pioche, Panaca, and Caliente. The economy of Panaca is based principally on agriculture. Just north of Panaca is Cathedral Gorge State Park. Fifteen miles south of Panaca is the town of Caliente. Caliente has approximately 800 residents. It was at one time an important railroad center but this major industry has all but vanished with the advancement of railroad technology. The Nevada State Girls Training School is located at Caliente. This state plant is one of the most modern in the West and serves about 50 girls. Caliente Elementary School, grades one through eight, has an enrollment of approximately 150. The Union Pacific railroad has its right of way through the center of Caliente. Just out of Caliente is Ryan State Park. Southwest of Caliente some 55 miles is located the town of Alamo. Alamo has approximately 300 residents who base their economy primarily on agriculture. Located at Alamo is Pahrnagat Valley Elementary School and Pahrnagat Valley High School. The high school has an enrollment of approximately 40 students; the elementary school has an enrollment, grades one through six, of approximately 60 students. Just south of Alamo is a United States Migratory Water Fowl Refuge. The predominant religion in Lincoln County is the Church of Jesus Christ of Latter-Day Saints.

Description of Clark County

Clark County (Figure 3) has four large centers of population: Las Vegas, North Las Vegas, Henderson, and Boulder City. In addition there are many outlying small rural areas. Three of these were involved in the project. Mesquite, lying on the border of Arizona and Nevada is a town having a population of approximately 700. At Mesquite is located Virgin Valley Elementary and Virgin Valley High School. These two schools are a combined plant and have a student enrollment of approximately 350 students, grades one through twelve. The economy of Virgin Valley is agricultural. Thirty-five miles southwest of Mesquite is the town of Overton. The educational plant at Overton is the Moapa Valley Elementary and High School, with a student enrollment of approximately 450 students. Overton is the gateway to the Valley of Fire State Park and to the northern part of Lake Mead. The economy is based primarily on agriculture. Indian Springs lies 45 miles northwest of Las Vegas. It has a population of approximately 1,000. It is an air base and military community and the housing is composed of mobile trailer homes. The school has a population of approximately 250, grades one through nine. Indian Springs transports its high school students to Las Vegas.

Financial Distribution

The financial obligation for the project was divided into four areas:

1. The cost of educational materials would be assumed by the



CLARK COUNTY

Figure 3. Clark County map

local school district.

2. Reimbursement of 50 per cent of the cost of those materials applicable under Title III to the National Defense Education Act (NDEA) of 1958 would be reimbursed by the State Department of Education of the local school district upon proper application.

3. Expenses for consultants for workshops and other conferences and training sessions of staff would be assumed by the Western States Small Schools Project.

4. The expenses for the State Foreign Language Consultant would be covered under his regular salary.

Workshops

Orientation

An orientation workshop was planned for October 7 and 8 at the Clark County Education Center in Las Vegas. An educational consultant representing the publishers was procured to give orientation to the teachers and administrators. He spent the afternoon of the 7th and the morning of the 8th orienting the experimental teachers to the materials they were going to use and the procedure for using them. He was a highly dynamic person and the interest he motivated in the teachers was obvious. After the orientation the teachers expected to implement the program just as soon as the materials purchased had arrived.

Description of materials

The materials consisted of well articulated components having the basic characteristics of an audio-lingual-visual approach. It consisted of 18 short 16mm films in color for presentation of the dialog, 18 film-strips which demonstrated each individual line of dialog, 18 drill tapes, 18 test tapes, and visually cued and reading and writing texts for the first 18 lessons. It was anticipated that approximately 10 lessons would be covered in the fiscal year of 1966. The teachers were given special manuals to assist them in understanding the Spanish contained in the lessons and procedures for instruction.

Reinforcement workshop

A workshop was held in November 1965 to acquaint the experimental teachers with contrastive English-Spanish phonics and to reinforce procedures for instruction in the classroom. This conference was held at the Clark County Education Center, Las Vegas, Nevada. The workshop was conducted by the Foreign Language Consultant for the Nevada State Department of Education. Instruction was given in the sounds of English and how they are produced, and the sounds of Spanish and how they contrast; and ways of improving pronunciation.

A name was selected at this time for the project and approved by the teachers. Project LEEP (La Lengua Extranjera en la Escuela Pequena) it was hoped, might provide some answers and experience which would

give educational thrust in foreign languages and small schools.

"Feedback" came from the teachers concerning the project and how it had been accepted in answer to a questionnaire. These comments served as a guide to the State Foreign Language Consultant when he visited the classes monthly.

Below are the results of the questionnaire answered by the non-specialists involved in teaching experimental classes during the November 1965 in-service workshop conducted in Las Vegas, Nevada.

Question 1. How has the program been received by the students involved in the project?

Teacher A: I find excellent reception of this program by the students.

Teacher B: The project has been accepted very well by both the students and parents. However, there are about three students that will have trouble and may not receive the project at all.

Teacher C: Interest by the students is and has been high. Students are ready to move ahead and have been asking for the next lesson. The colorful film sets the stage beautifully.

Teacher D: Generally, the students are excited. One student rebelled for the first few days because of his Mexican ancestry but he is now most enthusiastic.

Teacher E: The program has been received very well in the 6th and 7th grades and the majority of the 8th grade. Four girls in the 8th grade are starting to adjust to the program as they should. I've found an early morning class is preferable.

Teacher F: In general, they have reacted enthusiastically. I do find some students hesitant to express themselves in a strange tongue--they seem embarrassed--attentive but not active.

Question 2. What general observations have you made about the parents' attitudes toward the program?

Teacher A: Parents are vocally enthusiastic and have expressed a desire for a class for themselves. Fellow teachers, both parents and non-parents, have also expressed a desire to have a class.

Teacher B: About twelve parents and teachers came to my room for the P.T.A. program. They were very interested in the program and wanted to know if an adult education class would be offered. I have heard no negative remarks.

Teacher C: Parents that have expressed themselves are eager for their children to have this opportunity. Most parents did attend the P.T.A. demonstration and explanation of the program. I have not had one parent question whether or not "I know what I am doing."

Teacher D: Parents are very enthusiastic about this as it is a good beginning for the Lincoln County High School program. The only question that was raised was why a non-Spanish speaking teacher was teaching the course when there was a Spanish speaking teacher in the school.

Teacher E: Parents that have seen or heard about the program are in favor of it very much. One parent wants to know how we can take the time for this program out of our busy schedule. A fellow teacher that speaks Spanish fluently remarks on how much keen interest has been aroused among the children.

Teacher F: Generally, the parents are happy to have their child taking part--they wondered why it had not been introduced before. The only hitch has been caused by one student who has had it before and therefore feels qualified to evaluate.

Question 3. What is the biggest problem that you have encountered to this point?

Teacher A: My biggest problem is holding the time down to approximately twenty minutes.

Teacher B: The biggest problem I see is the boredom of the fast students when we do much drilling.

Teacher C: Personally, I am excited about the materials but have not been able to find enough time to be far ahead of the students. Although it is not a big problem, some students learned questions better and faster than I did.

Teacher D: No significant problem so far.

Teacher E: My biggest problem is that I have not always been able to put the correct inflections on the words. I feel I need a pronunciation key besides the record. We have had difficulty in getting all of our supplies.

Teacher F: I need to find a way for defining some of the words as well as presenting a timely flow of materials.

Question 4. Have you been able to follow the daily directions in the expanded teachers' manual? If yes, how long is your class period of instruction? If no, what seems to be the difficulty?

Teacher A: I follow the daily directions, but my class period has been running 25 - 30 minutes. (For a larger class, individual response simply takes time.)

Teacher B: Following the directions, my class period runs twenty minutes. This depends upon questions by students, ability and attitude of class.

Teacher C: I have held to the twenty minute class and have not been able to keep up with the manual at all.

Teacher D: No. There are no provisions for students' questions or for discussion of cultural implications.

Teacher E: -----

Teacher F: I have had a slight difficulty in staying day for day with the manual because of preparation of material plus answering questions. I have found it necessary to use at least thirty minutes.

Consultant visits

The State Foreign Language Consultant visited each school at least once every month. During this visit, he called to the attention of the teacher, the obvious errors in pronunciation that may have occurred through the lack of familiarity with Spanish. Procedures were discussed for implementing and supplementing the program and he also gave general encouragement and advice.

Mid-year workshop

John Oller, the author of the educational materials used in the project conducted an in-service workshop at Panaca in March 1966. He reviewed certain procedures for instruction in which he felt a need, after having visited a number of the project schools. He also gave the teachers a preview of advanced levels of the program.

End of school year workshop

A final workshop was conducted at the University of Nevada in Reno during the week of June 6 - 10, 1966 (see Appendix). This workshop was an intensive 32 hour program planned to better prepare the teacher for the following school year and to provide aid and help in those areas of weakness encountered during the visits of the different consultants to the individual classrooms and schools. Two hours of re-certification and increment credit were offered to those who completed the one week workshop.

Evaluation

In-class observation

At least once a month the Foreign Language Consultant visited each class and made observations as to problems and areas for improvement. Also involved was a subjective evaluation as to achievement.

In addition, outside observers were brought in on two different occasions to evaluate the classes to see how they compared with classes which they usually observe. The observers were Marvin Roth, Junior High--Senior High Coordinator for Washoe County Schools, Reno, Nevada; Jack Clark Davis, Associate Professor of School Administration, College of Education, University of Nevada, Reno, Nevada; Eldon Drake, Professor of Education and Coordinator for Student Teaching, Utah State University, Logan, Utah; and Leon Beutler, Assistant Professor, Secondary Education, Utah State University, Logan, Utah. These educators are not only experienced in teacher observation but also Mr. Roth and Dr. Davis have foreign language backgrounds. The results of the observations are found in chapter on results.

Pre-test and post-test

A pre-test was given to all students involved in the experiment. The objective of the test was to find out which students had a background in Spanish which might affect the overall achievement. These students were identified and their post-test scores were not counted for purposes

of determining significance. A post-test was given in listening comprehension. Native speakers of Spanish served as voices on tape for the test. The answer sheet used by students is found in the Appendix. The results were tabulated and a t-ratio was run. The findings are in the chapter on results.

Formulas used on post-test results

The standard deviation was computed by using the formula:

$$SD = \frac{\sum x^2}{N} \quad (\text{Gronlund, 1965, pp. 389-390})$$

The standard deviation was then used to compute the F-ratio using the formula:

$$F = \frac{Sx_1^2}{Sx_2^2} \quad (\text{Walker and Lev, 1953, p. 140})$$

The t-ratio was found by employing the formulas:

$$\sigma \bar{X}_1 - \bar{X}_2 = \frac{(N_1 + N_2) (\sum x_1^2 + \sum x_2^2)}{N_1 N_2 (N_1 + N_2 - 2)}$$

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - 0}{\sigma \bar{X}_1 - \bar{X}_2} \quad (\text{Senders, 1958, pp. 483, 546})$$

The results then were looked up in a t-table to establish area of confidence.

Summary

Several assumptions were made, i.e.

1. Elementary pupils will benefit in several ways from FLES type programs.
2. Pupils can learn by using technological device, prepared materials, etc., with a minimum of specialization on the part of the elementary teacher.
3. Materials, specialized equipment, etc. are available.

Using these assumptions as a base, plans were made for teaching Spanish in classes who had as teachers non-specialists in foreign languages. Rural schools were identified that had an interest in participating in the project. In these schools classes and teachers were also selected which corresponded to the criteria previously determined. Workshops were conducted throughout the year's instruction relevant to procedures and problems encountered.

Evaluation was carried on by the Foreign Language Consultant in monthly visits and by professional observers contracted for this purpose. Pre-tests and post-tests were conducted and the results tabulated to determine if the hypotheses should be rejected.

RESULTS AND FINDINGS

Forms of Evaluation

Introduction

Several forms of evaluation were employed, some more subjective than others. Because of the fundamental skills approach, it is difficult to objectively test first level instruction. A measurement instrument was devised whereby the understanding skills of the students could be tested and through in-class observation by professional observers a fairly objective evaluation could be given of the speaking skills. The hypothesis is here again restated for the purposes of relating to the findings and results of the study.

Hypothesis

The regular classroom teacher, given the necessary orientation and guidance and by using sound teaching materials, can teach a foreign language in its beginning level with a satisfactory degree of student achievement as compared to a class taught by a language specialist.

In-class Observations

Procedure

During the week of March 7 - 11, 1966, a tour was made of several of the schools involved in the project. The two observers were: one,

the former head of the foreign language department of a large high school in Reno, Nevada; the other, Associate Professor for School Administration and Supervision at the University of Nevada, Reno, Nevada. Both have had extensive experience as teachers, administrators, and as supervisors of teachers.

On May 11 - 13, 1966, another tour was made with two more professional observers. They were both from the College of Education, Utah State University and have had broad experience in teacher supervision and educational media.

These four observers visited the classes while in session and filled out a previously prepared questionnaire concerning their observations (see Appendix). The following section describes these observations.

Findings of in-class observations

Table 5 shows the evaluation given by the observers in two areas: (a) Student-Teacher-Subject Rapport and (b) Student achievement.

It can be noted that four of the six schools received a better than average rating in all areas. One was close to average and one was judged below average. Four schools achieved above average in light of project goals, while two rated about average. In comparison to foreign language classes normally observed by the evaluators all but one of the experimental classes was rated favorably. Comments made by the evaluators after observation of each school are found in Table 6.

Table 5. In-class observation

School	Student-teacher-subject rapport ^b			Student achievement ^b	
	Rate the class as to attitude toward subject	Rate the teacher as to attitude toward subject	Rate the class as to attitude toward subject	In light of project goals, how does class achievement stand?	In relation to classes taught by a language teacher, how does this class compare?
A $\bar{X}$ ^a	5	5	4.5	4.5	Favorable
B $\bar{X}$	4	3	4	3	Favorable
C $\bar{X}$	3	2	3	3	Unfavorable
D $\bar{X}$	4.5	4.5	4.5	4.25	Favorable
E $\bar{X}$	4	4.5	4	4	Favorable
F $\bar{X}$	5	4.75	4.75	4.75	Favorable
Total $\bar{X}$	4.25	3.96	4.13	3.88	

^aMean^bRated on a 5-point basis. (5 points being highest rating)

Table 6. Evaluators' comments

School	Comment
A	The eagerness of the students and the rapport between the students and the teacher make for a highly desirable learning situation even though the teacher has no prior background in the language. The students' progress in pronunciation and intonation excels even that of their teacher. The teacher showed a great deal of enthusiasm when working with students. He appeared to be following the program very closely. Student achievement exceeded all expectations of what normally would be accomplished in a similar situation of teaching a foreign language at this grade level.
B	Teacher seemed just a bit disorganized in his introduction to the unit the hour we visited. His finesse in handling the audio-tape and the filmstrip projections lacked proper timing. I felt a little time was wasted in getting things underway. The class was responsive to the audio-visual presentation. The response of the pupils towards the subject was good. Many interviewed indicated they liked the materials being used by the teacher. The teacher in this situation did not seem to share the enthusiasm of the students. However, there was every indication that the students were achieving, and perhaps we observed on a "bad day." Students appeared to be achieving the desired goals and those interviewed indicated the audio-visual materials were a very significant part of the program. Student interest was generally good and their desire to learn Spanish was very evident.
C	Teacher gave the impression that he was so busy (which he was!) as principal-teacher that he had been forced to neglect the Spanish program. We caught him on a very busy day and may have rated him higher in attitude toward the subject another day. Teacher admittedly did not spend adequate time in the program. However, when Mr. Anderson quizzed the class and conducted the discussion, the class was very responsive and did an adequate job on the oral Spanish recitation. I felt the audio-visual materials to be extremely important in this situation because of the lack of enthusiasm and

Table 6. Continued

School	Comment
D	interest on the part of the teacher. The teacher, by his own admission, was too busy to spend too much time in the language program. I did feel the students were achieving, but not to the degree of students in other schools we visited. The eagerness of the students and the rapport between the students and the teacher make for a highly desirable learning situation even though the teacher has no prior background in the language. The students' progress in pronunciation and intonation excels even that of their teacher. Teacher and students worked very closely together. Students responded quickly and enthusiastically to direction by the teacher. Students showed a great deal of proficiency in reading and speaking the language. Oral response was fairly good. The teacher's enthusiasm for the program was much in evidence. Mr. Anderson's handling of class discussion brought immediate response from the pupils, which indicated they were being exposed to the audio-visual materials. How can teachers in the audio-visual project reach marginal interest pupils through non-visual techniques? Admittedly on some days the teaching does not involve tapes, films, or filmstrips. This presents a real challenge to reach <u>all</u> pupils; I noticed some evidence of disinterest and saw very little effort to reach one or two pupils who were pre-occupied. Student-teacher attitude toward the program was good and students were obviously achieving. I did feel that a few of the students were not as highly motivated as they might have been. As mentioned above I felt a wider range of motivation and interest in this class than any of the others visited. There were three or four students who appeared to be indifferent toward the subject, and did not reflect the enthusiasm of the majority of the students. This could be attributed to many factors and may be an unfair observation.
E	Mr. Hollingshead admittedly was having some difficulty with the language but his enthusiasm had motivated pupils to a high degree. Very enthusiastic teacher. Mr. Hollingshead even went to the effort of developing his own overlays for the

Table 6. Continued

School	Comment
	overhead projector. This technique coupled with an oral discussion and feedback from the pupils would be an excellent supplement to the teachers' normal audio-visual presentation (films, filmstrips, and tapes). Student-teacher rapport was excellent, and although the teacher had not achieved the speaking skill of many of the students I felt a real effort on his part to make the class interesting. Certainly there was evidence of achieving, and a strong desire to make the project successful. Students interviewed stressed the value of the audio-visual materials. I was very impressed with the interest conveyed by the students in this class and felt that some students in the class were achieving even beyond expectations.
F	The eagerness of the students and the rapport between the students and the teacher make for a highly desirable learning situation even though the teacher has no prior background in the language. The students' progress in pronunciation and intonation excels even that of their teacher. Teacher was nervous when the observers were in his classroom. He made a few mistakes; however, the students reacted to them favorably and it appeared the rapport was very good. This class had the three best readers of all the classes observed. They made an outstanding presentation of reading--better than a great number of beginning college foreign language classes I have observed. There were some students in the class that were disinterested and my assumption is that it can probably be attributed to a lower I.Q. One student that was classified as having a lower I.Q. read much better in Spanish than alot of students at the same grade level read in English. This was an outstanding classroom situation. Pupils were well trained, were enthusiastic and responded to their teacher's teaching. The rapport between pupil and teacher was most positive. The language proficiency exhibited by Mr. Jackson's pupils was remarkable. They certainly reached their goals in this classroom.

Table 6. Continued

School	Comment
	Both student and teacher appeared to be very enthusiastic about the project and were very eager to learn Spanish. Student-teacher rapport was outstanding. The teacher, with the aid of the audio-visual materials, set the stage, and the students with their obvious enthusiasm were definitely achieving the desired goals. As mentioned above, student achievement was very evident. Excellent planning and preparation on the part of the teacher was obvious, and students appeared to be highly motivated.

The comments made by the observers further clarify the ratings given each school and will be discussed more in detail in the chapter on implications and discussion.

Achievement Test

A post-test was given during the week before the close of school to the control class and to the experimental classes. The measurement instrument was derived after consultation with several leading foreign language educators in the United States. It tested the students' oral comprehension particularly with about 20 per cent based on reading and oral comprehension. The answer sheet can be seen in the Appendix. There was a possible perfect score of 40 points. Table 7 shows the comparison of the means of the experimental and control classes in percentages derived from the raw scores. The average in percentages for the total experimental group was 58.8 per cent compared to 59.0 per cent for the

Table 7. Comparison of mean scores in percentages of each experimental school and control-school at end of first year in Spanish

School	Experimental group $\bar{X}$	Control group $\bar{X}$ N=21	Difference in favor of control group	% to which experimental group achieved as high as control group
A(N=31)	62.0	59.0	-3.0	105.1
B(N=22)	59.3	59.0	- .3	100.5
C(N=22)	57.5	59.0	+1.5	97.5
D(N=19)	50.0	59.0	+9.0	84.7
E(N=19)	61.3	59.0	-2.3	103.9
F(N=17)	60.8	59.0	-1.8	103.0
Total (N=130)	58.8	59.0	+ .2	99.7

control group. The per cent to which the total experimental group achieved as high as the control group was 99.7 per cent. School D achieved lowest of the experimental classes at 84.7 per cent of the control group. This still indicates that the percentage comparison is favorable.

The data in Table 8 show the result of the F ratio and t-test run on the scores derived from the achievement test given to the experimental and control schools at the end of the first year.

The F ratios indicate that the scores represent those expected of a fairly normal distribution. School D and School F showed an F ratio of 1.00. School A showed the largest F at 1.60. None of the schools indicated an F ratio outside of the expected normal distribution.

The t-test indicated that for the total experimental group as compared to the control group there was no significant difference with a score of $-.098$. School D, however, showed a score of -2.914 which was significant at the 1 per cent level of confidence. All of the other experimental classes showed t-ratios that were not significant as compared to the control class. The null hypothesis then cannot be rejected for five of the six experimental schools and for the total experimental group.

Table 8. Comparison of mean scores and standard deviations of experimental and control groups at the close of the first year of instruction in Spanish

School	Experimental mean	(N=130) S.D.	Control mean	(N=32) S.D.	F	t ^a	Significance
A(N=31)	24.8	3	23.6	3.8	1.60	+1.244	Non-significance
B(N=22)	23.7	4.8	23.6	3.8	1.59	+ .073	Non-significance
C(N=22)	23.0	4.3	23.6	3.8	1.28	- .472	Non-significance
D(N=19)	20.0	3.8	23.6	3.8	1.00	-2.914	1 per cent level
E(N=19)	24.5	4.7	23.6	3.8	1.52	+ .651	Non-significance
F(N=17)	24.3	3.8	23.6	3.8	1.00	+ .549	Non-significance
Total N=130	23.5	4.4	23.6	3.8	1.34	- .098	Non-significance

^aSenders, Virginia L., *Measurement and Statistics*, Oxford University Press, New York, 1958, pp. 482-483.

DISCUSSION AND IMPLICATIONS

Additional Observations

There were several interesting happenings that occurred in this study. One of these was that there was an apparent increase in teacher-student rapport in most of the schools. This was noted not only by the observer but by the teachers themselves. An explanation for this perhaps would be that the student saw the teacher in a role similar to his own, that of being a student and having to do his homework, so to speak. Another aspect is that perhaps the teacher was able to more realistically understand the burden of assignments given to the students, and that for him, learning Spanish became a bigger task than he had envisioned. There might also be a third area which could explain this apparent increase in teacher-student rapport and that being that the teacher himself being involved in the project was motivated to do perhaps better preparation or more extensive and intensive preparation than he had previously done. This sometimes is referred to as the "halo effect" and shows up in increased achievement and interest at least in the initial stages of a project. The "halo effect" cannot be discounted completely in this study in as much as these people were motivated by being involved in something new and the observation of change in student-teacher rapport would seem to indicate that there was some sign of this effect. However, it is

difficult if not impossible to measure to what extent the "halo effect" is involved in increased achievement in any study where an obvious change or new pattern is involved.

A number of the teachers involved in the project indicated an increased ability of certain so called "underachievers" or low I.Q. students to progress adequately and satisfactorily in the speaking of Spanish and reading and writing of the same. They felt that there was some area in the methodology used in the Spanish materials that provided for good transition from the spoken language to the written language. It is very possible that continued study would prove fruitful in this area in perhaps helping students to learn to read and write their own native language better.

One significant observation was made by the State Director for Western States Small Schools Project and the Foreign Language Consultant for the Nevada State Department of Education; i.e., if a teacher has had no background in a particular subject, in this case being Spanish, they do not feel sufficiently competent or confident to stray from the established pedagogical procedure involved in the particular program or set of materials. By not varying the program of instruction to a great extent, it was possible to keep a fair amount of uniformity and progress in instruction which would seem quite evident from the results indicated in the last chapter.

Second and Third Year Study

The study made by Drs. Johnson, Flores, Ellison, and Riestra indicates that in the first year no significant difference was found in achievement. However, as the material became more difficult in content, and as time went by, the difference grew to a point where at the end of the third year of study it did become significant. It is the opinion of the author of the WSSSP-FLES Study that this is reasonable and is to be expected. This can be attributed to a lack of subject content background that is more necessary in the later stages than in the first year study. Another aspect is that the "halo effect" has worn off and the interest in the Spanish course becomes like that of any other subject. The same can be said for the students as to motivation and desire. I do feel, however, that some classes will not show significance as soon as other classes due to the teachers' enthusiasm, administration backing and other factors involved.

Implications of WSSSP-FLES Project

This study was made with a view in mind of what possibly could be done to provide a foreign language program or other similar program in small schools where the lack of a qualified teacher is obvious. It is not the most satisfactory program and is not to be encouraged in place of a qualified language specialist. However, for an administration who is interested in having a foreign language program and where trained personnel

are not available, it is one way in which to meet this need. The results of this study are not construed to represent populations or conditions of other areas other than those studied in this project. It does strengthen the project findings conducted by the University of Illinois and will serve as further reinforcement to the feasibility of such a program in other areas of the country.

It would seem that the possibility of utilizing audio-visual media that is correlated and integrated into certain subject materials with proper training and orientation as to their use, could provide much needed programs in areas where there is a shortage or lack of qualified teachers to teach them.

Weaknesses

As already has been indicated, it must be implied that as the course progresses into the more difficult stages of instruction, the academic returns diminish. The extent to which they diminish depends upon many factors and it would depend upon administration, teachers, and parents as to what cut off level the diminishing returns would be significant. One weakness involved in this study was that of having a small control group. Inasmuch as this study was not a laboratory research project, but rather a project in a field where conditions as they were could not be changed to satisfy all of the conditions for pure research, it can only be assumed from the tests conducted that the control group

did fall within the limits of normalcy. Another weakness was that of a testing instrument. To the knowledge of the author, there has been no instrument developed which was designed for this type of project. However, one developed by the author followed those procedures determined by noted specialists in the foreign language field to be good and reliable for testing. It has been the observation of the author that some items should have been changed to make it more reliable. However, they were not, in order to preserve the reliability of the testing conducted. More research and study needs to be undertaken and conducted in the area of preparation of reliable measuring instruments in elementary foreign languages which can be standardized for different levels.

SUMMARY AND CONCLUSIONS

Teacher shortages in the United States have become more critical during the last few decades of increased knowledge and technological advances. In the post-Sputnik era, emphasis placed in certain subject areas considered vital to the national defense have created alarming shortages of teachers in these areas, one of which is foreign languages. Coupled with this shortage is the difficulty facing the small rural school to provide an environment which attracts teachers and then retains them for any length of time. Again, lack of financial backing due to small enrollments also makes it very difficult for small schools to offer instruction in the elective areas of which foreign languages is usually a part. Consequently, students in small schools are handicapped by not having as large or expansive a background as students from larger schools.

This study was begun in order to measure several items: (a) Can a foreign language program be provided without hiring additional personnel? (b) Can so called audio-lingual-visual materials provide an adequate program in the beginning levels using non-specialists as teachers? Materials were selected which were considered to be of excellent quality. Subsequently, schools were identified along with classroom teachers and a procedure and method was put into operation

for implementing these materials and programs into the school. One control school was selected that had a similar program as far as time, class scheduling, and distribution of students. The teachers were given orientation by educational specialists in Spanish and then following the program, as outlined, taught Spanish for one year on the basis that a successful degree of achievement would indicate continuance of the program for an additional two years. At the conclusion of the project, all of the students had been observed by professional people and had been given a post-test in order to compare achievement of experimental and control groups.

Conclusions

It can be concluded from the results shown that for the total experimental group there was no significant difference between their achievement and achievement of the control school. This applies only to this population involved in the study and would indicate that other areas could use these results as an indication of what might occur under similar circumstances. It was concluded that the achievement of experimental students in this project was satisfactory and that the program would continue for an additional two years, if not longer.

LITERATURE CITED

- Board of Education of the City of New York. 1961. Status of Foreign Language Projects. 12 p.
- Borg, Walter R. 1965. Perceptions of the teacher's role in the small rural school. Study for the Western States Small Schools Project. Utah State University, Logan, Utah.
- "Casey Bill" AB 2564 (Section 7604). 1961. Education Code. California.
- Dusel, John P. 1965. General observations on the results of the survey of Foreign Language Offering and Enrollments in California Public Schools.
- Fiber, Louise A. 1964. FLES reconsidered. *The French Review* 37:446-449.
- Graybeal, William S. 1966. Teacher supply and demand in public schools, 1966. Research Division, National Education Association, Washington, D. C.
- Grittner, Frank M. 1965. The influence of the state foreign language supervisor upon foreign language instruction in America. *Modern Language Journal* 49(2):91-94.
- Gronlund, Norman E. 1965. Measurement and Evaluation in Teaching. The Macmillan Company, New York.
- Hulse, James W., E. R. Larson, and James M. Leavy. 1967. The World Book Encyclopedia, Field Enterprises Educational Corporation Chicago, Illinois.
- Johnson, Charles E., Joseph S. Flores, and Fred P. Ellison. 1960. A summary of the major findings at the close of the first year of the study of the development of methods and materials to facilitate foreign language instruction in elementary schools. University of Illinois. (Mimeographed)
- Johnson, Charles E., Joseph S. Flores, and Fred P. Ellison. 1961a. The effect of foreign language instruction on basic learning in elementary schools. *The Modern Language Journal* 45(5):200-202.

- Johnson, Charles E., Joseph S. Flores, and Fred P. Ellison. 1961b. The University of Illinois experiment in FLES: A progress report. *Hispania* 44(3):511-519.
- Johnson, Charles E., Joseph S. Flores, and Fred P. Ellison. 1961c. A summary of the major findings at the close of the second year of the study of the development of methods and materials to facilitate foreign language instruction in elementary schools. University of Illinois. (Mimeographed)
- Johnson, Charles E., Joseph S. Flores, Fred P. Ellison, and Miguel A. Riestra. 1963. The development and evaluation of methods and materials to facilitate foreign language instruction in elementary schools. University of Illinois. (Mimeographed)
- Modern Language Association of America. 1964. Foreign language program notes. Publications of the Modern Language Association of America 79(4):A-12 and A-14.
- Modern Language Association of America. 1966. Standards for teacher-education programs in modern foreign language. *Modern Language Journal* 50(6):399-400.
- Moskowitz, Gertrude. 1964. I'd like to teach FLES, but . . . , *The French Review* 37:565-567.
- Nevada Community Profiles. 1965. Department of Economic Development, Carson City, Nevada.
- Oller, John. 1963. La Familia Fernandez (A visual-audio-lingual method for learning Spanish), Encyclopedia Britannica Educational Corporation, Wilmette, Illinois.
- Senders, Virginia L. 1958. *Measurement and Statistics*, Oxford University Press.
- Starr, Wilmarth H. 1961. Proficiency tests in modern foreign languages. Publications of the Modern Language Association of America 76(2): 6-8.
- Walker, Helen M. and Joseph Lev. 1953. *Statistical Inference*. Henry Holt and Company, New York.
- Wilson, Roy K. 1966a. *Education U.S.A., National School Public Relations Association*, Washington, D.C.

- Wilson, Roy K. 1966b. Education U.S.A., National School Public Relations Association, Washington, D.C.
- Wonder, John P. 1965. The bilingual Mexican-American as a potential teacher of Spanish. *Hispania* 33:97.

APPENDIX



BURNELL LARSON
SUPERINTENDENT OF
PUBLIC INSTRUCTION

STATE OF NEVADA
Department of Education

CARSON CITY, NEVADA 89701

September 8, 1965

JACK K. CLARK
ASSISTANT SUPERINTENDENT
INSTRUCTION

Could you please fill in the form below and return it in the enclosed envelope as soon as possible.

Thank you for your cooperation

Sincerely,

Merlin D. Anderson
Foreign Language Consultant

NAME _____ DEGREE _____ FROM _____
(college or university)

Total Years of Teaching Experience _____

Years of Teaching in Nevada _____

LANGUAGE PREPARATION

Language studied in elementary, jr. high, high school _____

How many years? _____

Language studied in college or university _____

How many years? _____

RESIDENCE ABROAD

Which country or countries? _____

How long in each country? _____

ANY OTHER CONTACT WITH LANGUAGE? Explain.

WSSSP/FLES

PRE-TEST

STUDENT'S NAME _____ CODE _____

SCHOOL _____ CODE _____

1. Is language other than English ever spoken in the home? _____
(yes or no)
2. Does your father know well a language other than English? _____
(yes or no)
3. Does your mother know well a language other than English? _____
(yes or no)
4. Are any of your sisters or brothers studying a language other than English? _____
(yes or no)
5. Have you ever studied a language other than English? _____
If yes, for how long? _____
(months) (yes or no)

ANSWER SHEET

- | | | | | | |
|---------|---|---|-----|---|---|
| Example | T | F | 8. | T | F |
| 1. | T | F | 9. | T | F |
| 2. | T | F | 10. | T | F |
| 3. | T | F | 11. | T | F |
| 4. | T | F | 12. | T | F |
| 5. | T | F | 13. | T | F |
| 6. | T | F | 14. | T | F |
| 7. | T | F | 15. | T | F |
| 16. | A | B | C | D | |
| 17. | A | B | C | D | |
| 18. | A | B | C | D | |
| 19. | A | B | C | D | |
| 20. | A | B | C | D | |

W S S S P
Western States Small Schools Project "LEEP"

SCHOOL DISTRICT _____ Code _____
 SCHOOL _____ Code _____
 EVALUATOR _____ Code _____
 DATE _____

STUDENT-TEACHER-SUBJECT RAPPORT

1. In your opinion, is more enthusiasm generated by the students through the use of visuals?

YES ☐ NO ☐

2. If yes, how significant is this enthusiasm?

highly significant ☐ slightly significant ☐ non-significant ☐

3. How well do you think these materials take into account individual differences?

excellent ☐ above average ☐ average ☐ below average ☐ poor ☐

4. Rate the class as to attitude toward subject

☐ ☐ ☐ ☐ ☐

5. Rate the teacher as to attitude toward subject.

☐ ☐ ☐ ☐ ☐

6. Rate the class as to attitude toward teacher

☐ ☐ ☐ ☐ ☐

7. COMMENTS:

STUDENT ACHIEVEMENT

8. In light of project goals, how does class achievement stand?

☐ ☐ ☐ ☐ ☐

9. In relation to classes taught by a language teacher, how does this class compare?

FAVORABLE ☐ UNFAVORABLE ☐

10. COMMENTS:

11. SUGGESTIONS:

WSSSP/FLES

FINAL TEST

STUDENT NAME _____

CODE _____

SCHOOL _____

CODE _____

Part I

1. _____

2. _____

3. _____

Part II

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

9. A B C D

10. A B C D

Part III

11. _____ 12. _____ 13. _____ 14. _____ 15. _____

Part IV

16. _____ 17. _____

Part V

18. A B C D

19. A B C D

20. A B C D

21. A B C D

22. A B C D

Part VI

23. A. Se llama Pedro.
B. Vive aquí en esta casa.
C. Yo tengo mucho frio.
D. ¿Como se llama el perro?
24. A. Sí, me gusta mucho.
B. Enrique va a nadar.
C. Tengo un perro.
D. Me gusta comer.
25. A. ¿Puedo ir con ustedes?
B. Hoy es viernes.
C. Mañana es jueves.
D. El se llama Carlos.
26. A. Está en su casa.
B. Es muy gordo.
C. Tengo cinco años.
D. Gloria es mi amiga.
27. A. Buenos días ¿cómo estás?
B. Aquí vienen mis hermanas.
C. Adios.
D. Vamos a jugar beisbol.

WESTERN STATES SMALL SCHOOLS PROJECT WORKSHOP
in Foreign Languages

Project "LEEP"

Application for two hours recertification credit

A. LENGTH OF COURSE

1. It will begin on June 6 and end on June 10, 1966.
2. There will be four (4) classroom sessions of six (6) hours duration each and one session of eight (8) hours duration.
3. Meetings are scheduled for each day from June 6 through 10.
4. It is anticipated that there will be between ten to twelve participants. Enrollment is limited to people engaged in teaching "La Familia Fernandez."

B. INSTRUCTIONAL STAFF

1. Mr. Merlin D. Anderson, Foreign Language Consultant for the State Department of Education, B.S. from Utah State University, and has completed two NDEA Institutes in Spanish.
2. Mr. David L. Jesser, Director, Western States Small Schools Project.

C. FACILITIES

The course will be held at the Jot Travis Student Union building in the Truckee Room. The University of Nevada foreign language laboratory, located in the humanities building will be at the disposal of the participants. Also, the University is providing a 16 mm. projector, a 35 mm. slide projector, and a tape recorder.

D. COURSE CONTENT

1. The title of the course of instruction will be "Methodology and Techniques for Project 'LEEP'."
2. The objective is to provide participants with additional skills and knowledge in order to conduct efficiently the Project for the coming fiscal year.

WESTERN STATES SMALL SCHOOLS PROJECT
Page 2

3. See attached schematic for the course outline.
4. Instructional procedure will include lectures, demonstrations, movies, slides, tape recordings, laboratory participation, music, etc.
5. Course requirements--participant must have complete attendance due to the highly intensive nature of the course. There will be no outside requirements in addition to attendance.
6. Resources--participants will have use of Encyclopedia Britannica materials, including films, film strips, tape recordings, teachers manuals, and related linguistic materials.

WSSSP "LEEP" PROJECT WORKSHOP

University of Nevada - Reno

June 6 -- 10, 1966

- (1) Participants should check in at White Pine Hall between the hours of 3 - 7 P.M. on Sunday, June 5.
- (2) Expenses for meals and lodging will be taken care of by WSSSP.
- (3) Meals will be taken at the Dining Hall; a table will be reserved for the participants.
- (4) Participants should bring their teachers' edition of "La Familia Fernandez." No other materials are necessary.
- (5) The arrangements for travel reimbursement should be worked out by the participant. It is anticipated that a minimal number of cars will be used.

Arrangements for accommodations can be made for spouses at the rate of \$6.40 per day.

Sunday evening meal, June 5, will probably be at the participant's expense.

JUNE

Truckee Room Jot
Travis Student Union
University of Nevada,
Reno

	6	7	8	9	10
AM	8 ORIENTATION 9 LESSON 1 10 LESSON 1 11 INDIVIDUALIZING LESSON 1 12 LUNCH	SPANISH LINGUISTICS INDIVIDUALIZING, LESSON 2 AND 3 LUNCH	TAPING PROBLEMS and PRACTICE INDIVIDUALIZING LESSONS 7, 8, and 9 LUNCH	LESSONS 10, 11, and 12 LABORATORY WORK LUNCH	LESSONS 13, 14, and 15 LABORATORY WORK LUNCH
PM	1 PRONUNCIATION PROBLEMS 2 ENGLISH LINGUISTICS 3 LABORATORY WORK 4 5	PRONUNCIATION DRILLS AND PROBLEMS INDIVIDUALIZING LESSONS 4, 5, & 6	BASIC SPANISH SYNTAX & GRAMMAR SPANISH MUSIC SESSION	QUESTION - ANSWER SPANISH BASIC SPANISH SYNTAX & GRAMMAR	LESSONS 16, 17, & 18 INDIVIDUALIZING LESSONS 13 - 18 TESTING